STATEMENT OF BASIS

as required by LAC 33:1X.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0104264; AI 31428; PER20030001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: Louisiana Land and Water Company

Charmingdale Subdivision 2800 North 7th Street West Monroe, LA 71291

II.

PREPARED BY:

Todd Franklin

DATE PREPARED:

May 8, 2006

III. PERMIT ACTION: reissue LPDES permit LA0104264, AI 31428; PER20030001

LPDES application received: July 23, 2003 Financial Assurance received: January 30, 2006 Revised LPDES application received: April 27, 2006

EPA has not retained enforcement authority.

LPDES permit issued: May 1, 1998 LPDES permit expired: April 30, 2003

IV. **FACILITY INFORMATION:**

- The application is for the discharge of treated sanitary wastewater from a privately owned Α, treatment facility serving the Charmingdale Subdivision.
- В. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located ½ mile south of Rilla, east of Highway 165 in Ouachita Parish.
- D. The treatment facility consists of a single cell oxidation pond. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location:

Latitude 32° 24' 30" North

Longitude 92° 5' 40" West

Description:

treated sanitary wastewater

Average Expected Flow: 80 homes @ 400 GPD each = 32,000 GPD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

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V. <u>RECEIVING WATERS:</u>

The discharge is into an unnamed ditch; thence into Bayou Mouchoir de L'ourse; thence into Petticoat Bayou in segment 080904 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 080904 of the Ouachita River Basin are as indicated in the table below.¹:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	N/A	N/A	N/A

¹/The designated uses and degree of support for Segment 080904 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 080904 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005, from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. <u>HISTORIC SITES:</u>

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 080904; Bayou Lafourche-Near Oakridge to Boeuf River near Columbia; is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 080904 was previously listed as impaired for organic enrichment/low DO, priority organics including Dioxins, nutrients, suspended solids/turbidity, and phosphorus, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 080904:

Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients

As per the TMDL, of the 24 point sources in Subsegment 080904, only four point sources, including the Charmingdale Subdivision wastewater treatment facility, were considered large enough to be included in the TMDL model. The TMDL required a treatment upgrade for the four point sources included in the model. The limitations imposed on these four facilities are as follows: 5.0 mg/l for DO, 10.0 mg/l for BOD₅, 5.0 mg/l for ammonia nitrogen, and 2.5 mg/l for organic nitrogen. Therefore, these limitations shall be placed into the permit. Interim limitations shall be placed into the permit to give the permittee time to meet the newly imposed limitations.

Total Kjeldahal Nitrogen (TKN) is the organic nitrogen concentration plus the ammonia nitrogen concentration. Therefore, the ammonia nitrogen and organic nitrogen limits shall be replaced by a single TKN limitation of 7.5 mg/l monthly average.

TMDL for TSS, Turbidity, and Siltation for 13 Subsegments in the Ouachita River Basin

As per the TMDL,

Point sources do not represent a significant source of TSS as defined in this TMDL. Wastewater treatment facilities discharge primarily organic TSS, which does not contribute to extensive habitat impairment resulting from sedimentation. The organic TSS is a non-conservative constituent that would only be detected as a component in proximity to the discharge point. Municipal permits contain a TSS limitation and a specific narrative requirement to prevent organic solids accumulation. Because an

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enforceable mechanism is in place to protect from discharges of organic suspended solids, no TMDL is required for these materials.

Therefore, TSS limitations shall be placed into the permit in accordance with the current state policies.

<u>Dioxin TMDL for Tisdale Brake, Staulkinghead Creek, Little Bayou Beouf, Wham Brake, and Bayou Lafourche</u>

According to the TMDL, the International Paper's (IP) Louisiana mill is the only known source of dioxin loading to Bayou Lafourche. Because the Charmingdale Subdivision sewage treatment facility is not a known source of dioxin, no limitation is required in the permit.

Interim Effluent Limits:

Outfall 001

Interim limits shall become effective on the effective date of the permit and expire on March 29, 2008.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	N/A*	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	N/A*	15 mg/l	23 mg/l	Limits are set through Best Professional Judgement (BPJ) in a manner consistent with technology based limits and the previous LPDES permit.
Total Kjeldahal Nitrogen (TKN)	N/A*	Report mg/l	Report mg/l	A limitations for TKN will be required in the Final Effluent Limits listed below. Therefore, in the interim period, a reporting requirement shall be placed into the permit for information gathering purposes.
Dissolved Oxygen (DO)	N/A*	Report mg/l	N/A	A limitations for DO will be required in the Final Effluent Limits listed below. Therefore, in the interim period, a reporting requirement shall be placed into the permit for information gathering purposes.

^{*}Concentration limits are used in accordance with LAC 33:1X.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:1X.709.B references LAC 33:1X.711 which express BOD₅ and TSS in terms of concentration.

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Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:1X.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on March 29, 2008, and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD₅	N/A*	10 mg/l	15 mg/l	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.
TSS	N/A*	15 mg/l	23 mg/l	Limits are set through Best Professional Judgement (BPJ) in a manner consistent with technology based limits and the previous LPDES permit.
Total Kjeldahal Nitrogen (TKN)	N/A*	7.5 mg/l	15 mg/l	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.
Dissolved Oxygen (DO)	N/A*	5 mg/l	N/A	Limits are set in accordance with the Bayou Lafourche TMDLs for Dissolved Oxygen and Nutrients.

^{*}Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

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The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:1X.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. <u>PREVIOUS PERMITS:</u>

LPDES Permit No. LA0104264: Issued: May 1, 1998

Expired: April 30, 2003

Effluent Characteristic	Discharge Limit	ations	Monitoring Requirements		
	Monthly Avg.	Weekly Avg.	Measurement	<u>Sample</u>	
·			Frequency	<u>Type</u>	
Flow	Report	Report	Continuous	Recorder	
BOD ₅	10 mg/l	15 mg/l	2/month	Grab	
TSS	15 mg/l	23 mg/l	2/month	Grab	
Fecal Coliform					
Colonies/100 ml	200	400	2/month	Grab	
рН	Range (6.0 su -	~ 9.0 su)	2/month	Grab	

XI. <u>ENFORCEMENT AND SURVEILLANCE ACTIONS:</u>

A) Inspections

A review of the files indicates that no recent inspection have been performed for this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates that no recent enforcement actions have been administered against this facility.

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C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2004 through December 2005 has revealed the following violations (please note that DMRs for the months of January through March 2005 and July through September 2005 were missing from the file):

Parameter	Outfail	Period of Excursion	Permit Limit	Reported Quantity
BOD ₅ , Monthly Avg.	001	January 2004	10 mg/l	17.50 mg/l
BOD ₅ , Weekly Avg.	001	January 2004	15 mg/l	17.50 mg/l
TSS, Monthly Avg.	001	January 2004	15 mg/l	41.50 mg/l
TSS, Weekly Avg.	001	January 2004	23 mg/l	41.50 mg/l
BOD ₅ , Monthly Avg.	001	January 2004	10 mg/l	48.30 mg/l
BOD ₅ , Weekly Avg.	001	January 2004	15 mg/l	48.30 mg/l
TSS, Monthly Avg.	001	January 2004	15 mg/l	65.00 mg/l
TSS, Weekly Avg.	001	January 2004	23 mg/l	65.00 mg/l
BOD ₅ , Monthly Avg.	001	February 2004	10 mg/l	29.90 mg/l
BOD ₅ , Weekly Avg.	001	February 2004	15 mg/l	29.90 mg/l
TSS, Monthly Avg.	001	February 2004	15 mg/l	63.00 mg/l
TSS, Weekly Avg.	001	February 2004	23 mg/l	63.00 mg/l
TSS, Monthly Avg.	001	February 2004	15 mg/l	22.00 mg/l
BOD ₅ , Monthly Avg.	001	March 2004	10 mg/l	26.30 mg/l
BOD ₅ , Weekly Avg.	001	March 2004	15 mg/l	26.30 mg/l
TSS, Monthly Avg.	001	March 2004	15 mg/l	58.00 mg/l
TSS, Weekly Avg.	001	March 2004	23 mg/l	58.00 mg/l
BOD ₅ , Monthly Avg.	001	March 2004	10 mg/l	40.20 mg/l
BOD ₅ , Weekly Avg.	001	March 2004	15 mg/l	40.20 mg/l
TSS, Monthly Avg.	001	March 2004	15 mg/l	76.00 mg/l
TSS, Weekly Avg.	001	March 2004	23 mg/l	76.00 mg/l
BOD ₅ , Monthly Avg.	001	April 2004	10 mg/l	23.7 mg/l
BOD ₅ , Weekly Avg.	001	April 2004	15 mg/l	24.70 mg/l
TSS, Monthly Avg.	001	April 2004	15 mg/l	38.5 mg/l
TSS, Weekly Avg.	001	April 2004	23 mg/l	40.00 mg/l
BOD ₅ , Monthly Avg.	001	May 2004	10 mg/l	26.70 mg/l
BOD ₅ , Weekly Avg.	001	May 2004	15 mg/l	26.70 mg/l
BOD ₅ , Monthly Avg.	001	June 2004	10 mg/l	13.63 mg/l
TSS, Monthly Avg.	001	June 2004	15 mg/l	19.25 mg/l
TSS, Weekly Avg.	001	June 2004	23 mg/l	24.50 mg/l
BOD ₅ , Monthly Avg.	001	July 2004	10 mg/l	25.23 mg/l
BOD ₅ , Weekly Avg.	001	July 2004	15 mg/l	33.36 mg/l
TSS, Monthly Avg.	001	July 2004	15 mg/l	20.75 mg/l
TSS, Weekly Avg.	001	July 2004	23 mg/l	22.50 mg/l
BOD ₅ , Monthly Avg.	001	November 2004	10 mg/l	11.15 mg/l
TSS, Monthly Avg.	001	November 2004	15 mg/l	26.25 mg/l
TSS, Weekly Avg.	001	November 2004	23 mg/l	40.00 mg/l
BOD ₅ , Monthly Avg.	001	December 2004	10 mg/l	21.24 mg/l
BOD ₅ , Weekly Avg.	001	December 2004	15 mg/l	28.90 mg/l
TSS, Monthly Avg.	001	December 2004	15 mg/l	18.25 mg/l
BOD ₅ , Monthly Avg.	001	April 2005	10 mg/l	26.91 mg/l
BOD ₅ , Weekly Avg.	001	April 2005	15 mg/l	29.83 mg/l
TSS, Monthly Avg.	001	April 2005	15 mg/l	93.50 mg/l

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TSS, Weekly Avg.	001	April 2005	23 mg/l	109.50 mg/l
BOD ₅ , Monthly Avg.	001	May 2005	10 mg/l	27.30 mg/l
BOD ₅ , Weekly Avg.	001	May 2005	15 mg/l	27.30 mg/l
TSS, Monthly Avg.	001	May 2005	15 mg/l	95.00 mg/l
TSS, Weekly Avg.	001	May 2005	23 mg/l	95,00 mg/l

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The Monitoring Requirements, Sample Types, and Frequency of Sampling for this facility shall be as follows:

Effluent Characteristics	Monitoring Requirements		
	Measurement	<u>Sample</u>	
	<u>Frequency</u>	<u>Type</u>	
Elavi	1/week	Magazina	
Flow		Measure	
BOD ₅	2/month	Grab	
Total Suspended Solids	2/month	Grab	
TKN	2/month	Grab	
DO	2/month	Grab	
Fecal Coliform Bacteria	2/month	Grab	
рН	2/month	Grab	

In order to allow the permittee time to upgrade the facility to meet limitations imposed by a TMDL, INTERIM LIMITS are proposed for this facility.

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS as specified in accordance with the following schedule:

ACTIVITY	DATE
Achieve Interim Effluent Limitations and Monitoring Requirements	On the effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements	On or before March 29, 2008

The above listed activities must be achieved on or before the deadline date. Additionally, the permittee shall submit a progress report outlining the status of all facility improvements on a yearly basis until compliance is achieved.

Within 14 days of completion of the new facility or facility upgrade and/or expansion, the Permittee shall notify the Department of Environmental Quality-Office of Environmental Services in writing that

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construction has been completed.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

Where the percent project completion reported is less than would be required to assure completion of necessary upgrades by the required date, the report of progress shall also include and explanation for this dèlay and proposed remedial actions.

No later than 14 days following a date for a specific action (as opposed to a report of progress), the permittee shall submit a written notice of compliance or noncompliance.

If Louisiana Land and Water Company is unable to comply with the above issued Schedule of Compliance, the company shall submit an alternative compliance schedule, for consideration by this Office, within the Draft permit public notice period.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

XIV <u>REFERENCES</u>:

<u>Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy,"</u> Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards,"</u> Louisiana Department of Environmental Quality, 2004.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program,"</u> Louisiana Department of Environmental Quality, 2004.

<u>Low-Flow Characteristics of Louisiana Streams</u>, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

<u>Index to Surface Water Data in Louisiana</u>, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, Louisiana Land and Water Company, Charmingdale Subdivision, April 27, 2006.